

South Coast Air Quality Management District Implementing OEHHA's Revised Health Risk Assessment Guidelines



Background

The South Coast Air Quality Management District (SCAQMD) has a comprehensive air toxics control program with the primary focus on the protection of public health. This multifaceted program includes specific requirements for permitting equipment, air toxic rules to require best management practices and air pollution control technologies, air toxics monitoring studies, and continuous review of existing facilities under the Toxics Hot Spots Program with emission reductions required for those that exceed the SCAQMD's risk thresholds. The SCAQMD and the regulated industries have made substantial progress in reducing air toxic emissions. Since 1990, health risks from non-diesel air toxics have been reduced by up to 85 percent.

What Does a Health Risk Assessment Capture?

Different toxic air contaminants have different potencies and different health impacts, such as cancer and non-cancer health effects. In addition, the exposure duration, breathing rates, and a person's sensitivity add to the complexity of analyzing air toxic risk. These assumptions are purposefully conservative to be health protective, but there are other uncertainties. Health Risk Assessments estimate a "health risk" which is a probability or chance that a person will experience a particular health outcome. Risk assessment should not be confused with the actual occurrence or certainty that a disease is going to occur. These assessments serve as a useful risk management tool to guide the development of risk reduction programs.

Who Develops the Guidelines for Preparing Health Risk Assessments?

The Office of Environmental Health Hazard Assessment (OEHHA) is the state agency under the California Environmental Protection Agency that is required by state law (Health and Safety Code §44360(b)(2)) to develop and update risk assessment methods under the Air Toxics Hot Spots program. Air districts throughout California use OEHHA's health risk assessment guidance. On March 6, 2015 OEHHA approved a revision to the Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments.

What are the Revised OEHHA Guidelines?

Consistent with the Children's Environmental Health Protection Act of 1999, the Revised OEHHA Guidelines incorporate new studies on the sensitivities of infants and children as well as new data on breathing rates and time spent at home. Even though no change in actual toxic emissions or exposure, the revised calculation results in estimates of health risks to residents that can be 3 times higher than previously estimated. The Revised OEHHA Guidelines do not substantially change the risk estimate for off-site workers.

How Will the SCAQMD Continue to Ensure Public Health Protection?

The SCAQMD's existing air toxics control program will continue to ensure public health protection. The SCAQMD staff is recommending that the current risk thresholds in permitting (Rules 1401 and 1401.1) and AB2588 (Rule 1402) be maintained. Permitting rules for air toxics establish strict health risk thresholds that each new and modified piece of equipment must adhere to in order to receive an SCAQMD permit. The SCAQMD's AB2588 Toxic Hot Spots Program will continually review existing facilities and where necessary, require emissions reduction. In addition, the SCAQMD's existing suite of rules that apply to various equipment types or industry categories such as metal plating, metal spraying, lead melting, diesel internal combustion engines, dry cleaning, etc. will be implemented, enforced, and if necessary, strengthened to account for the increase in estimated health risks.

What Will the Revised OEHHA Guidelines Mean for Businesses?

The SCAQMD staff reviewed five years of permitted data to understand how the revised OEHHA Guidelines would affect new permit applications. The majority of permits for new and modified equipment were well below the permitting risk thresholds, and will not require additional controls to meet current thresholds. However, there are a small number of source categories that may potentially need additional controls to meet permitting thresholds under the revised OEHHA Guidelines. In addition, special interim provisions in PAR 1401 will temporarily allow spray booths and retail gasoline stations to use OEHHA's previous risk assessment guidelines until the need for source-specific rules are evaluated and proposed. For AB2588 facilities, the revised OEHHA Guidelines could potentially require about 20 facilities to implement additional risk reduction measures. In addition, there could be between ten and thirty Rule 212 public notices required for diesel emergency back-up engines. The SCAQMD staff has prepared a Draft Socioeconomic Report discussing the potential impacts from implementation of the Revised OEHHA Guidelines under PAR 1401, 1401.1, 1402, and 212.

Questions and Comments

If you have questions and comments please call or email Susan Nakamura at (909) 396-3105 or snakamura@aqmd.gov or visit our website at www.aqmd.gov.

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